Attachment 9. Past Performance

City of Folsom Groundwater Resources Study

Department of Water Resources Local Groundwater Management Assistance Grant Agreement No. 4600003650

This sectiont includes documentation of past performance on a previous grant under the Local Groundwater Management Assistance Act of 2000 for the Groundwater Resources Study for Grant Agreement No. 4600003650 between DWR and The City of Folsom. A LGA grant in the amount of \$250,000 was awarded to investigate the viability of developing a groundwater resource for dry year groundwater supply and/or groundwater banking within the City, since the City is subject to dry year water supply reductions under the Water Forum Agreement. This initial Phase I investigation was both a "desktop" study and field investigation.

A change in scope recommended by the project Technical Advisory Committee was accomplished with no net change in grant funding costs. The project was completed within its revised scope, budget and schedule while meeting the original goal and objectives. The final progress report from the City of Folsom that summarizes the project performance is attached herein. The City of Folsom made significant progress in investigating our groundwater resource potential in the 2005/2006 study. The results of this 2006/2006 study have been very helpful to the City in focusing future activities to improve the understanding of local groundwater resources. The recommendations from this study are the basis of the scope of work presented in the Work Plan for this grant proposal.

Phase II Historic Utilities Rehabilitation Project

United States Environmental Protection Agency Grant Agreement XP-96955401

Project Period: 9/15/05 - 10/31/08

55% EPA cost share up to and not exceeding \$240,600

Total project cost: \$1,655,211

This project included the rehabilitation and replacement of deteriorating sewer lines in the City of Folsom. As part of the project, the City was required to perform the necessary "fair share" goals in accordance with the EPA's Program for Utilization of Small, Minority, and Women's Business Enterprises for construction, supplies, services, and equipment. To comply with EPA's reporting requirements, the City submitted semi-annual progress reports throughout the project's duration and completed a final project report and payment request under EPA's Financial Status Report. The project was completed on time, within the grant budget, and within the grant project period.

Water System Optimization Review Program

United States Department of the Interior, Bureau of Reclamation, Assistance Agreement R09AP200074

Project Period: 9/21/09-9/30/12

USBR cost share not to exceed 50% or \$299,468 Total project costs to date: \$2,971,955.26

This program is part of USBR's Water for America Challenge Grant Program. As part of the grant, the City will assess the potential to improve water conservation, increase water use efficiency, and enhance water management to ensure long-term sustainability of the City's water supplies. The three tasks associated with the program include water system efficiency evaluation, conjunctive use, and a

system optimization review final report. To comply with USBR's reporting requirements, the City

submits semi-annual progress reports throughout the project period, with the final report due within 90 days of the project end date. The project is scheduled to be completed within the project period and within the grant budget.

Alder Creek Watershed Planning Watershed Project

Department of Water Resources CALFED Proposition 50 Watershed Grant Program 3005-2006 Project Period: 6/25/09-2/28/10

Total project costs t: \$399,375 with no Coty cost-share required

The goal of the Alder Creek Watershed Project was to gather stakeholders together to inform and guide the process of conducting a watershed assessment to characterize existing conditions and preparing a watershed management action plan to recommend policies and projects to protect the health of the watershed and the creek in light of planned future development. The State temporarily suspended funding due to the State's Budget crisis after awarding the grant, and later restarted the project and on June 25, 2009 and extended the term of the Agreement to February 28, 2010. To comply with DWR's reporting requirements, the City submitted monthly progress reports throughout the project's duration and completed a final project report and payment request. The project was completed on time, within the grant budget and within the grant project period.

2011 Beverage Container Recycling and Litter Cleanup Activities

California Department of Resources Recycling and Recovery - \$18,936

This grant did not require any cost-sharing from the City. The funds were used for the procurement of recycling bins and cans, public outreach and education activities, and the collection and disposal costs related to litter abatement or illegal dumping. The City's Recycling Division has disbursed the funding within the parameters of the program guidelines, within the grant budget, and within the specified time requirements.

2012 Beverage Container Recycling and Litter Cleanup Activities

California Department of Resources Recycling and Recovery - \$19,167

This grant did not require any cost-sharing from the City. The funds were used for the procurement of recycling bins and cans, public outreach and education activities, and the collection and disposal costs related to litter abatement or illegal dumping. The City's Recycling Division has disbursed the funding within the parameters of the program guidelines, within the grant budget, and within the specified time requirements.

Folsom Lake Trail Bike/Pedestrian Overcrossing

Environmental Enhancement and Mitigation Program - \$295,000 Sacramento Area Council of Governments Bicycle and Pedestrian Funding Program - \$575,000 State of California Bicycle Facilities Unit Bicycle Transportation Account - \$320,000 State of California Bicycle Facilities Unit Bicycle Transportation Account - \$460,000 Sacramento Area Council of Governments Bicycle and Pedestrian Funding Program - \$690,000

These are three different grants for a proposed bike/pedestrian trail approximately four miles long. The proposed alignment traverses from the City's Historic Truss Bridge to Green Valley Road and is identified in the City's Bikeway Master Plan. Phase I of this project includes the proposed 310-foot bike/pedestrian overcrossing along Folsom Lake Crossing Road. Environmental, right of way acquisition and mitigation are complete and currently in the final design phase. The project will go to construction in Spring 2013. To date, the City has expended approximately \$1,000,000 and the project is on schedule and within the proposed budget. Total project budget is \$3,009,850 with \$629,950 in matching funds from the City.

Folsom Lake Trail Phase II

Sacramento Area Council of Governments Bicycle and Pedestrian Funding Program - \$895,000

This project is Phase II to the Folsom Lake Trail Bike/Pedestrian Overcrossing. This project includes the design and construction of a Class I trail from the City's Historic Truss Bridge to the Folsom Lake Trail Bike/Pedestrian Overcrossing and is identified in the City's Bikeway Master Plan. The City is wrapping up the environmental work and will be complete in August 2012. Final design is underway and construction is expected to start in the summer of 2013. This is a multi-agency project involving the Bureau of Reclamation and State Parks Department. The project is on schedule with the grant period and within the proposed budget. The total project budget is \$1,005,000 with \$110,000 in matching funds from the City.

Lake Natoma Waterfront Enhancement Trail

Proposition 50 California River Parkway Grant Program - \$757,800

This project proposes to construct an Americans with Disability Act (ADA) compliant accessible path from Lake Natoma Crossing to the water's edge of Lake Natoma. The City is wrapping up the environmental work and will be complete in August 2012. Final design is underway and construction is expected to start in the summer of 2013. This is a multi-agency project involving the Bureau of Reclamation and State Parks Department. The project is on schedule with the grant period and within the proposed budget. The total project budget is \$907,000 with \$150,000 in matching funds from the City.

CITY OF FOLSOM

Utilities Department

50 Natoma Street Folsom, California 95630 April 3, 2005



Kenneth V. Payne, P.E. **Director**

Walter E. Sadler, P.E. Assistant Director

Mr. Michael Floyd Department of Water Resources P.O. Box 942836 Sacramento, California 94236-001

127457-001

Subject:

Final Progress Report

City of Folsom Groundwater Resources Study, DWR Grant Agreement No. 4600003650

Dear Mr. Floyd:

This letter summarizes the City of Folsom and Brown and Caldwell (BC) activity for work under the Local Groundwater Management Assistance Act of 2000 for the Groundwater Resources Study for Grant Agreement No. 4600003650 between DWR and the City of Folsom.

EXECUTIVE SUMMARY

This final progress report includes a summary of the work proposed under the Grant Application, the actual work performed, and the information gained from the study.

Proposed Work

The main objective of the City of Folsom's Groundwater Resources Study under the AB303 Local Groundwater Assistance Fund Grant was to investigate the viability of developing a groundwater resource for dry year groundwater supply and/or groundwater banking within the City, since the City is subject to dry year water supply reductions under the Water Forum Agreement. This initial Phase 1 was envisioned as both a "desktop" study based on existing data and information previously developed by others and a field investigation that included exploratory drilling of two 4 or 6" test wells and four adjacent observation wells for aquifer testing. The scope also included for aquifer testing and one year of water level and quality monitoring. The specific goals of Phase 1 were to develop a conceptual hydrogeologic model of the study area that will be tested with field investigations to allow an assessment of the City's groundwater resources potential. The proposed groundwater study was primarily investigative in nature. If Phase 1 was successful, additional phases of work would result in production and well equipping construction projects and ultimately, active groundwater production well and/or aquifer storage and recovery well facilities.

The Phase 1 scope of work included the following general work tasks:

- Project management, oversight, reporting, and public outreach
- Review of previous water resources data and development of a Geographical Information System (GIS) and conceptual hydrogeologic model for the study area;
- Conducting test well drilling, construction, sampling and testing
- Performing one year of water level and quality monitoring

The work was planned to be completed by May 1, 2006 for the grant amount of \$250,000, as shown in the attached schedule and budget.

Actual Work

In March 2005, BC prepared a revised work plan that reflected changes to the project approach that the Technical Advisory Committee (TAC) recommended at its February 10, 2005 meeting. The changes to the scope of work were expected to have no net change in total cost and primarily include adding geophysical surveys to aid in drill site selection, while eliminating the four observation wells that were in the original work plan contained in the grant application. This revised work plan also added water level monitoring of the two Empire Ranch wells, reduces the aquifer testing to approximately one day per well, and reduces the water level and quality monitoring so that the project could be completed on schedule and within the original budget. The revised budget and schedule that were approved by DWR and the City of Folsom are attached.

Based on drilling conditions encountered during the test boring drilling in September 2005 at the E. Natoma Well Site, a change in scope of work in drilling specifications was authorized by the City, and an authorization of additional funds was submitted to the City in November 2005. This change in the scope of work was the result of the test borehole producing preliminary groundwater flows during drilling of approximately 300 gallons per minute (gpm), although it should be noted that these flows were not necessarily representative of anticipated yields from a completed well. However, the originally planned 4-inch well would not accommodate larger than a 7.5 HP pump, which would have a maximum capacity of approximately 100 to 120 gpm. An aquifer test at this pumping rate would not stress the aquifer and allow estimation of a definitive hydraulic conductivity. To pump the well at a higher and more meaningful rate, a 6-inch steel well casing and screen was preferable to allow a 6-inch pump with a maximum pumping rate of approximately 500 gpm at 150 feet. The upgrade to a 6-inch well required an increase in borehole size, which required removing the 10-inch drive casing and installing a 12-inch drive casing. It was also decided to also upgrade the well construction of the Glenn Drive well prior to drilling to avoid the costs associated with mid-borehole conversion. The upgrade in well construction also allowed for the potential future modifications so each well could potentially be used for irrigation purposes if desired. The additional costs for these upgrades were estimated at approximately \$15, 600, which the City is in the process of authorizing through funding that will be separate from and augment the DWR grant funding.

Information Gained

The study has accomplished its main objective of investigating the viability of developing a groundwater resource for dry year groundwater supply and/or groundwater banking to address the potential for City dry year water supply reductions under the Water Forum Agreement. The City/BC work has satisfied the requirements of the DWR AB303 Local Groundwater Assistance Fund Grant, and identified a groundwater resource that could be a valuable supplemental supply in the City's overall integrated water supply system.

Significant progress was made in investigating the City's groundwater resource potential in the current study. In contrast to the 1991 investigation in which two deep wells produced only 35 gpm and 85 gpm, the City now has two test wells that yielded 250 to 400 gpm during short-term pumping tests on opposite sides of the City. The East Natoma well is located in an area that may produce more than 600 gpm if a larger diameter well was installed, although aquifer testing would be required to confirm the sustainability of the yields.

Both of the test wells installed for this study are located in areas with low electrical resistivity in ancestral paleochannels of the South Fork of the American River. The study demonstrated that this geophysical tool is useful in locating favorable well locations in the shallow alluvial deposits.

The wells were constructed with steel casing so they can be utilized as irrigation supply wells at some point in the future if desired by the City. Although analyses indicate good water quality in both wells, supply wells constructed for potable use must have a sanitary seal of at least 50 ft below ground surface. Wells constructed with the minimum seal would most likely result in a significant reduction in groundwater production, thereby resulting in a non-economic municipal groundwater supply.

The identified groundwater supplies could be cost effective in supplying irrigation and/or process supplies to large individual users such as golf courses, parks, schools, commercial process water, etc., that currently depend on treated surface water. If such a supply is desired, the City should identify large water users and

evaluate if groundwater can augment or substitute for potable water. Depending on location, groundwater could also be used to augment recycled water using the existing or additional infrastructure (purple pipe) for distribution. In particular, groundwater could be used to augment recycled water to meet peak or drought demand, thus reducing capital and operating costs for recycled water. It is recommended that is option be further investigated in conjunction with recycled water and drought contingency planning.

An immediate benefit could be derived by augmenting the groundwater supply of the Empire Ranch Golf Course. Although details are sketchy, the golf course reportedly has a single groundwater well with a depth of approximately 80 feet that begins the irrigation season with a yield of approximately 1000 gpm. The well's yield declines during the summer and eventually the well goes dry in July or August. As a result, the golf course must transition to the City's potable water supply for its summer demand of approximately 1.3 million gallons per day (mgd). A second well that would augment the existing groundwater well supply would reduce or eliminate the need for City potable water during the summer, and the pumping test of the E. Natoma well indicates that it would serve this purpose. It is recommended that the City and golf course evaluate the feasibility of using E. Natoma well or drilling a new well to reduce peak summer and annual demands on the City's potable water supply in this way.

The electrical resistivity survey indicated other potential drill sites where the City can explore for additional groundwater supplies. The City can continue to expand its understanding of groundwater resources in the western portion of the City and explore other areas for groundwater resource potential by future electrical resistivity or other geophysical surveys. Open areas to the west and southwest, not yet covered by development, are prime areas for electrical resistivity surveys to identify other buried ancient channels or geologic structures that may provide potential drill sites.

Continued water level monitoring is recommended to document seasonal, annual, and long-term water level fluctuations, so that the suitability of the aquifer as a drought supply and the potential for groundwater banking can be more fully assessed. Monitoring with pressure transducers and data loggers supplied by DWR is planned over the next year, and subsequent periodic monitoring for incorporation into the SGA data management system is recommended to improve the understanding of the basin and groundwater management.

PROJECT STATUS

A. Work Performed

Legal Matters

One contract modification was necessary, which was a no-cost modification proposed in March 2005 and finalized on April 10, 2005. The City and DWR subsequently authorized increasing the drill hole diameter for the two sites from 4 inches to 6 inches in October 2005 during the drilling program to improve the aquifer testing. This change was accommodated with a minor cost impact that will be negotiated between the City and BC (no impact to grant budget).

Engineering Matters

- Task 1. (Project Management, Oversight, and Reporting) completed.
- Task 2. (Data Evaluation and Conceptual Model Development) completed.
- Task 3. (Well Drilling, Construction, Sampling, Testing) completed.
 - Drilled, installed, and developed two test wells in September and October 2005.
 - The two aquifer tests were completed in December 2005. Water quality samples were collected from each well at the end of each aquifer test.
- Task 4. (Compile, Analyze, and Disseminate Monitoring Data) completed.

Environmental Matters

None

B. Major Accomplishments

Tasks Completed

All four tasks have been completed as per the revised Scope of Work.

Milestones Met

All Tasks have been completed as per the revised schedule.

Meetings Held

The last of four TAC meetings was held February 10, 2006.

C. Issues and Concerns

None

D. Activities Planned for Next Quarter

Work

Task 1. (Project Management, Oversight, and Reporting)—final project closeout will be completed. The final technical study report deliverable is being conveyed separately.

Task 2. None

Task 3. None

Task 4. None

COST INFORMATION

A. Costs Incurred Since Project Inception

BC Expenditures		
by Task	Hours	Cost
Task 1	321.5	\$46,649.95
Task 2	363.25	\$78,912.57
Task 3	539.25	\$121,932.88
Task 4	17.00	\$2,500.45
Totals	1241	\$249,995.85

B. Actual Costs vs. Budget

FY 2004— 2005 budget:	\$250,000
Expenditures to date (including final quarter)	\$250,000
Balance of budget remaining	\$0

Project has been completed according to revised budget and schedule. The original and revised March 2005 budget (that included the addition of the geophysical survey) are attached as Enclosures A and B respectively.

SCHEDULE INFORMATION

A. Actual Schedule vs. Estimated

The project has been completed as per the March 2005 revised schedule. The original and revised schedules are attached as Enclosures C and D, respectively.

The City and Brown and Caldwell have enjoyed working with you on this interesting and important project, and appreciate the financial support and technical assistance provided by DWR. If you have any questions, please do not hesitate to call myself or Martin Steinpress at (925) 210-2408.

Walter Sadler, P.E. Assistant Director Utilities

cc:

Martin Steinpress, Brown and Caldwell Eric Hong, DWR

Enclosures (4)

Enclosure A Original Budget Detail, City of Folsom Groundwater Resources Study

Role	Principal-In Charge	Project Mgr Chief Hydrogeologist	Principal Engineer	Senior Geologist	Graphics	Admin	Total Hours	Labor Cost	ODCs (incl. 10% markup)	Total Cost
Billing rate, dollars per hour	220	199	159	134	92	70		(dollars)	(dollars)	(dollars)
TASKS		Tas	k Breakdov	vn, hours				(* * * * * * /	(2.2.2)	(3 3 3 3)
1.1 - Project Management Meetings	4	20	8	32	20	16	100	\$13,380	\$600	\$13,980
1.2 - Quarterly Status Reports		8	8	32	8	8	64	\$8,448	\$100	\$8,548
1.3 - Draft Study Report	2	8	16	40	8	16	90	\$11,792	\$200	\$11,992
1.4 - Final Study Report	2	8	2	24	4	8	48	\$6,494	\$100	\$6,594
1.5 - Study Documentation		8	8	8	8	4	36	\$4,952	\$200	\$5,152
1.6 - Public Outreach	2	4		8	8	2	24	\$3,184	\$400	\$3,584
Task I Subtotal	10	56	42	144	56	54	362	\$48,250	\$1,600	\$49,850
2.1 - Compilation/Evaluation of Existing Data		4	8	24	4	8	48	\$6,212	\$500	\$6,712
2.2 - Development of GIS Map and DB		6	4	16	8	2	36	\$4,850	\$100	\$4,950
2.3 - Develop Conceptual Model	2	8	4	20	4		38	\$5,716	\$100	\$5,816
2.4 - Water Quality		4		8	4	4	20	\$2,516	\$100	\$2,616
2.5 - Land Use/Ownership		2		8		8	18	\$2,030	\$100	\$2,130
2.6 - Conduct Environmental Check		2		8	2	2	14	\$1,794	\$400	\$2,194
2.7 - Prepare Summary Report	4	4	8	32	4	8	60	\$8,164	\$300	\$8,464
Task 2 Subtotal	6	30	24	116	26	32	234	\$31,282	\$1,600	\$32,882
3.1 - Complete Permitting and Agreements		4	8	16	4	2	34	\$4,720	\$330	\$5,050
3.2 - Prepare Work Plan and Contract Drilling	2	4	16	16	8	8	54	\$7,220	\$400	\$7,620
3.3 - Well Installation and Development		4	20	60	8	8	100	\$13,312	\$70,000	\$83,312
3.4 - Perform Aquifer Testing		8	20	50			78	\$11,472	\$31,000	\$42,472
Task 3 Subtotal	2	20	64	142	20	18	266	\$36,724	\$101,730	\$138,454
4.0 - Collect And Analyze Monitoring Data	4	32	26	100	16	8	186	\$26,814	\$2,000	\$28,814
Task 4 Subtotal	4	32	26	100	16	8	186	\$26,814	\$2,000	\$28,814
Total	22	138	156	502	118	112	1048	\$ 143,070.00	\$ 106,930.00	\$250,000.00

Notes:

Other Direct Costs (ODCs) added to the labor include mileage, field supplies, and subcontractor costs, as well as a 10% markup Associated Project Costs such as copies, telephone, computers and postage are included in the above rates

Enclosure B Revised Budget Detail, March 2005, City of Folsom Groundwater Resources Study

Role	Principal-In Charge	Project Mgr Chief Hydrogeologist	Principal Engineer	Senior Geologist	Graphics	Admin	Total Hours	Labor Cost	ODCs (incl. 10% markup)	Revised Total Cost	Original Total Cost
Billing rate, dollars per hour	220	199	159	134	92	70		(dollars)	(dollars)	(dollars)	(dollars)
TASKS		Tasl	k Breakdov	vn, hours							
1.1 - Project Management Meetings	4	20	8	32	20	16	100	\$13,380	\$600	\$13,980	\$13,980
1.2 - Quarterly Status Reports		8	8	32	8	8	64	\$8,448	\$100	\$8,548	\$8,548
1.3 - Draft Study Report	2	8	16	40	8	16	90	\$11,792	\$200	\$11,992	\$11,992
1.4 - Final Study Report	2	8	2	24	4	8	48	\$6,494	\$100	\$6,594	\$6,594
1.5 - Study Documentation		8	8	8	8	4	36	\$4,952	\$200	\$5,152	\$5,152
1.6 - Public Outreach	2	4		8	8	2	24	\$3,184	\$400	\$3,584	\$3,584
Task I Subtotal	10	56	42	144	56	54	362	\$48,250	\$1,600	\$49,850	\$49,850
2.1 - Compilation/Evaluation of Existing Data		4	8	24	4	8	48	\$6,212	\$500	\$6,712	\$6,712
2.2 - Development of GIS Map and DB		6	4	16	8	2	36	\$4,850	\$100	\$4,950	\$4,950
2.3 - Develop Conceptual Model	2	8	4	20	4		38	\$5,716	\$100	\$5,816	\$5,816
2.4 - Water Quality		4		8	4	4	20	\$2,516	\$100	\$2,616	\$2,616
2.5 - Land Use/Ownership		2		8		8	18	\$2,030	\$100	\$2,130	\$2,130
2.6 - Plan and Conduct Geophysics	2	8	4	40	16	8	78	\$10,060	\$30,166	\$40,226	\$0
2.7 - Conduct Environmental Checks		2		8	2	2	14	\$1,794	\$660	\$2,454	\$2,194
2.8 - Prepare Summary Report	4	8	8	40	4	8	72	\$10,032	\$300	\$10,332	\$8,464
Task 2 Subtotal	8	42	28	164	42	40	324	\$43,210	\$32,026	\$75,236	\$32,882
3.1 - Complete Permitting and Agreements		6	12	24	6	6	54	\$7,290	\$330	\$7,620	\$5,050
3.2 - Prepare Work Plan and Contract Drilling	2	4	24	16	8	8	62	\$8,492	\$400	\$8,892	\$7,620
3.3 - Well Installation and Development		8	20	60	8	8	104	\$14,108	\$47,952	\$62,060	\$83,312
3.4 - Perform Aquifer Testing		8	20	50	6	4	88	\$12,304	\$11,152	\$23,456	\$42,472
Task 3 Subtotal	2	26	76	150	28	26	308	\$42,194	\$59,834	\$102,028	\$138,454
4.0 - Collect And Analyze Monitoring Data	4	28	20	65	16	8	141	\$20,374	\$2,512	\$22,886	\$28,814
Task 4 Subtotal	4	28	20	65	16	8	141	\$20,374	\$2,512	\$22,886	\$28,814
Total	24	152	166	523	142	128	1135	\$154,028	\$95,972	\$250,000	\$250,000

Other Direct Costs (ODCs) added to the labor include mileage, field supplies, and subcontractor costs, as well as a 10% markup Associated Project Costs such as copies, telephone, computers and postage are included in the above rates

Enlosure C Original Project Schedule, City of Folsom Groundwater Resources Study

				2004										2005									2006	 5	
Item	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Grant Approval														-											
Board Authorization to Proceed																									
Task 1 Project Management, Oversight and Reporting																									
1.1 Project management meetings																									
1.2 Quarterly status reports																									
1.3 Draft Study Report																									
1.4 Final Study Report																									
1.5 Study Documentation																									
1.6 Public Outreach																									
Task 2 Data Evaluation and Hydrogeologic Conceptual Model																									
2.1 Compilation/Evaluation of Existing Data																									
2.2 Devlopment of GIS Map and Database																									
2.3 Develop Hydrogeologic Conceptual Model																									
2.4 Water Quality																									
2.5 Land Use/Ownership																									
2.6 Conduct Environmental Check																									
2.7 Prepare Summary Report/ Recommend Drill Sites																									
Task 3 Permit, Install and Survey Wells																									
3.1 Complete Permitting and Access Agreements																									
3.2 Work Plan and Contract Drilling Subcontractor																									
3.3 Well Installation and Development																									
3.4 Perform Aquifer Testing																									
Task 4 Monitoring Data Collection and Dissemenation																									
4.1 Collect, analyze, and distribute groundwater data																									

Note: See Section B.3 for details of individual tasks

Enclosure D Revised Project Schedule, March 2005, City of Folsom Groundwater Resources Study

		2004	2005																
Item	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Grant Approval																			
City Authorization to Proceed																			
Task 1 Project Management, Oversight and Reporting																			
1.1 Project management meetings																			
1.2 Quarterly status reports																			
1.3 Draft Study Report																			
1.4 Final Study Report																			
1.5 Study Documentation																			
1.6 Public Outreach																			
Task 2 Data Evaluation and Hydrogeologic Conceptual Model																			
2.1 Compilation/Evaluation of Existing Data																			
2.2 Devleopment of GIS Map and Database																			
2.3 Develop Hydrogeologic Conceptual Model																			
2.4 Water Quality																			
2.5 Land Use/Ownership																			
2.6 Perform Geophysical Surveys																			
2.7 Conduct Environmental Check																			
2.8 Prepare Summary Report/ Recommend Drill Sites																			
Task 3 Permit, Install and Survey Wells																			
3.1 Complete Permitting and Access Agreements																			
3.2 Work Plan and Contract Drilling Subcontractor																			
3.3 Well Installation and Development																			
3.4 Perform Aquifer Testing																			
Task 4 Monitoring Data Collection and Dissemenation																			
4.1 Collect, analyze, and distribute groundwater data																			